

Sequence listing.txt

SEQUENCE LISTING

<110> Genomine, Inc.
 POSTECH FOUNDATION

<120> Novel phytochrome-interacting protein and a use thereof

<130> OP05-1002

<150> KR 10-2004-0013663
 <151> 2004-02-27

<160> 15

<170> KopatentIn 1.71

<210> 1
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1
 ggatccaaat gtcaggctct aggccgact 29

<210> 2
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 2
 ctcgagctac ttgtttgctg cagcgagttc 30

<210> 3
 <211> 1455
 <212> DNA
 <213> Arabidopsis thaliana

<400> 3
 atggagacca agaatgagaa ttctgatggt tcacgggcag aggagtttaa aagtcaggcc 60
 aacgaagctt ttaaagggtca caaatactcc agtgctattg atctatatac aaaagctatt 120
 gaactcaaca gcaacaacgc tgtgtattgg gcaaatcgtg catttgctca cacaaaactg 180
 gaggaatatg gcagtgcaat acaggatgca tcgaaggcca ttgaagttga ttcaagatac 240
 tctaagggct attacaggcg tgggtgctgcg tatcttgcca tgggaaaatt taaggatgcc 300
 ttgaaggact tccaacagggt aaaaaggctt tctcctaata accctgatgc cacaagaaag 360
 ctaaaggaat gtgagaaagc agtgatgaaa ctcaaatttg aagaagcaat ctctgtgcc 420
 gtatctgaaa ggcgttcagt agctgagtc attgacttcc atacaataga gggtgagcca 480
 caatattctg gtgctagaat tgagggagag gaagttacct tagattttgt gaaaacgatg 540
 atggaggatt ttaagaacca aaaaacattg cataaacggt atgcctatca aatcgtctta 600

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cagactaggc aaatcttgct agcactgcct tctcttggtg atataagtgt tccacatggc      660
aaacatatca ctgtttgcgg tgacgttcat ggtcagttct acgatcttct caatatcttt      720
gagcttaatg gcctcccttc ggaggagaac ccatacctat ttaatggcga ctttgtggac      780
agaggctcat tctccgttga gatcatcctc actttgtttg ctttcaagtg catgtgccca      840
tcatccatat atctagccag aggaaaccat gaaagcaaga gcatgaacaa aatttatggt      900
tttgaggggtg aggttcgggtc caagttgagt gaaaaattcg tggatctctt tgctgaagtt      960
ttctgtttacc tcccgttggc tcatgttata aatgggaagg tcttcgtggt acatggaggt    1020
cttttcagtg ttgacggcgt gaaactctca gacatcagag ccattgacag attctgtgag    1080
ccaccagagg aaggactaat gtgtgaacta ttgtggagtg atcctcaacc tctccctgga    1140
agaggcccaa gcaagcgagg agttggtcta tcatttggtg gagatgtgac aaagaggttt    1200
ttgcaagata acaatttaga tttgttggtc cggtcacatg aagtaaaaga tgaaggttat    1260
gaggttgaac atgacggtaa actcataact gtcttctctg cgccaaatta ctgtgatcag    1320
atgggtaata agggagcctt cattcgtttt gaagctcctg atatgaagcc aaacattggt    1380
acattctcag cagtgcctca tccggatgtg aagcctatgg catatgcaaa caactttctc    1440
aggatgttca actaa                                                    1455

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<210>      4
<211>      484
<212>      PRT
<213>      Arabidopsis thaliana

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<400>      4
Met Glu Thr Lys Asn Glu Asn Ser Asp Val Ser Arg Ala Glu Glu Phe
  1          5          10          15
Lys Ser Gln Ala Asn Glu Ala Phe Lys Gly His Lys Tyr Ser Ser Ala
          20          25          30
Ile Asp Leu Tyr Thr Lys Ala Ile Glu Leu Asn Ser Asn Asn Ala Val
          35          40          45
Tyr Trp Ala Asn Arg Ala Phe Ala His Thr Lys Leu Glu Glu Tyr Gly
          50          55          60
Ser Ala Ile Gln Asp Ala Ser Lys Ala Ile Glu Val Asp Ser Arg Tyr
          65          70          75          80
Ser Lys Gly Tyr Tyr Arg Arg Gly Ala Ala Tyr Leu Ala Met Gly Lys
          85          90          95
Phe Lys Asp Ala Leu Lys Asp Phe Gln Gln Val Lys Arg Leu Ser Pro
          100          105          110
Asn Asp Pro Asp Ala Thr Arg Lys Leu Lys Glu Cys Glu Lys Ala Val
          115          120          125
Met Lys Leu Lys Phe Glu Glu Ala Ile Ser Val Pro Val Ser Glu Arg
          130          135          140
Arg Ser Val Ala Glu Ser Ile Asp Phe His Thr Ile Glu Val Glu Pro
          145          150          155          160

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Gln Tyr Ser Gly Ala Arg Ile Glu Gly Glu Glu Val Thr Leu Asp Phe
165 170 175
Val Lys Thr Met Met Glu Asp Phe Lys Asn Gln Lys Thr Leu His Lys
180 185 190
Arg Tyr Ala Tyr Gln Ile Val Leu Gln Thr Arg Gln Ile Leu Leu Ala
195 200 205
Leu Pro Ser Leu Val Asp Ile Ser Val Pro His Gly Lys His Ile Thr
210 215 220
Val Cys Gly Asp Val His Gly Gln Phe Tyr Asp Leu Leu Asn Ile Phe
225 230 235 240
Glu Leu Asn Gly Leu Pro Ser Glu Glu Asn Pro Tyr Leu Phe Asn Gly
245 250 255
Asp Phe Val Asp Arg Gly Ser Phe Ser Val Glu Ile Ile Leu Thr Leu
260 265 270
Phe Ala Phe Lys Cys Met Cys Pro Ser Ser Ile Tyr Leu Ala Arg Gly
275 280 285
Asn His Glu Ser Lys Ser Met Asn Lys Ile Tyr Gly Phe Glu Gly Glu
290 295 300
Val Arg Ser Lys Leu Ser Glu Lys Phe Val Asp Leu Phe Ala Glu Val
305 310 315 320
Phe Cys Tyr Leu Pro Leu Ala His Val Ile Asn Gly Lys Val Phe Val
325 330 335
Val His Gly Gly Leu Phe Ser Val Asp Gly Val Lys Leu Ser Asp Ile
340 345 350
Arg Ala Ile Asp Arg Phe Cys Glu Pro Pro Glu Glu Gly Leu Met Cys
355 360 365
Glu Leu Leu Trp Ser Asp Pro Gln Pro Leu Pro Gly Arg Gly Pro Ser
370 375 380
Lys Arg Gly Val Gly Leu Ser Phe Gly Gly Asp Val Thr Lys Arg Phe
385 390 395 400
Leu Gln Asp Asn Asn Leu Asp Leu Leu Val Arg Ser His Glu Val Lys
405 410 415
Asp Glu Gly Tyr Glu Val Glu His Asp Gly Lys Leu Ile Thr Val Phe
420 425 430
Ser Ala Pro Asn Tyr Cys Asp Gln Met Gly Asn Lys Gly Ala Phe Ile
435 440 445
Arg Phe Glu Ala Pro Asp Met Lys Pro Asn Ile Val Thr Phe Ser Ala
450 455 460
Val Pro His Pro Asp Val Lys Pro Met Ala Tyr Ala Asn Asn Phe Leu
465 470 475 480
Arg Met Phe Asn

<210> 5
<211> 24

Sequence listing.txt

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <400> 5
 ggatccatgg agaccaagaa tgag 24

 <210> 6
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <400> 6
 ctcgagttag ttgaacatcc tgag 24

 <210> 7
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <400> 7
 ggatccgatg tcaggctcta ggccgact 28

 <210> 8
 <211> 34
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <400> 8
 gctgatcagc atggtttccg gagtcggggg tagt 34

 <210> 9
 <211> 34
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <400> 9
 cccggccgga ctaatatggc atcatcagca tcat 34

 <210> 10
 <211> 27
 <212> DNA
 <213> Artificial Sequence

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<220>
<223>    PCR primer

<400>     10
ctcgagtcaa gagattgctt cttcaaa                                27

<210>     11
<211>     27
<212>     DNA
<213>     Artificial Sequence

<220>
<223>    PCR primer

<400>     11
ggatccatgc cagtatctga aaggcgt                                27

<210>     12
<211>     24
<212>     DNA
<213>     Artificial Sequence

<220>
<223>    PCR primer

<400>     12
atggagacca agaatgagaa ttct                                    24

<210>     13
<211>     24
<212>     DNA
<213>     Artificial Sequence

<220>
<223>    PCR primer

<400>     13
ttagttgaac atcctgagaa agtt                                    24

<210>     14
<211>     347
<212>     PRT
<213>     Arabidopsis thaliana

<400>     14
Ser Val Pro Val Ser Glu Arg Arg Ser Val Ala Glu Ser Ile Asp Phe
 1          5          10          15
His Thr Ile Glu Val Glu Pro Gln Tyr Ser Gly Ala Arg Ile Glu Gly
          20          25          30
Glu Glu Val Thr Leu Asp Phe Val Lys Thr Met Met Glu Asp Phe Lys
          35          40          45
Asn Gln Lys Thr Leu His Lys Arg Tyr Ala Tyr Gln Ile Val Leu Gln
          50          55          60
Thr Arg Gln Ile Leu Leu Ala Leu Pro Ser Leu Val Asp Ile Ser Val

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Sequence listing.txt

65	70	75	80
Pro His Gly Lys His 85	Ile Thr Val Cys Gly 90	Asp Val His Gly Gln 95	Phe
Tyr Asp Leu Leu 100	Asn Ile Phe Glu Leu 105	Asn Gly Leu Pro Ser 110	Glu Glu
Asn Pro Tyr 115	Leu Phe Asn Gly Asp 120	Phe Val Asp Arg Gly 125	Ser Phe Ser
Val Glu Ile Ile Leu Thr 130	Leu Phe Ala Phe Lys Cys 140	Met Cys Pro Ser	
Ser Ile Tyr Leu Ala 150	Arg Gly Asn His Glu Ser 155	Lys Ser Met Asn Lys 160	
Ile Tyr Gly Phe Glu 165	Gly Glu Val Arg Ser 170	Lys Leu Ser Glu Lys 175	Phe
Val Asp Leu Phe Ala 180	Glu Val Phe Cys Tyr Leu Pro Leu Ala 190	His Val	
Ile Asn Gly 195	Lys Val Phe Val Val 200	His Gly Gly Leu Phe 205	Ser Val Asp
Gly Val 210	Lys Leu Ser Asp Ile 215	Arg Ala Ile Asp Arg 220	Phe Cys Glu Pro
Pro Glu Glu Gly Leu 225	Met 230	Cys Glu Leu Leu Trp 235	Ser Asp Pro Gln Pro 240
Leu Pro Gly Arg Gly 245	Pro Ser Lys Arg Gly 250	Val Gly Leu Ser Phe 255	Gly
Gly Asp Val Thr 260	Lys Arg Phe Leu Gln 265	Asp Asn Asn Leu Asp 270	Leu Leu
Val Arg Ser 275	His Glu Val Lys Asp 280	Glu Gly Tyr Glu Val 285	Glu His Asp
Gly Lys Leu Ile Thr Val 290	Phe 295	Ser Ala Pro Asn Tyr 300	Cys Asp Gln Met
Gly Asn Lys Gly Ala Phe 305	Ile Arg Phe Glu Ala 315	Pro Asp Met Lys Pro 320	
Asn Ile Val Thr Phe 325	Ser Ala Val Pro His 330	Pro Asp Val Lys Pro 335	Met
Ala Tyr Ala Asn 340	Asn Phe Leu Arg Met Phe Asn 345		

<210> 15
 <211> 1041
 <212> DNA
 <213> Arabidopsis thaliana

<400> 15	
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gagccacaat attctggtgc tagaattgag ggagaggaag ttaccttaga ttttgtgaaa	120
acgatgatgg aggatttttaa gaaccaaaaa acattgcata aacggtatgc ctatcaaadc	180
gtcttacaga ctaggcaaat cttgctagca ctgccttctc ttgttgatat aagtgttcca	240

Sequence listing.txt

catggcaaac atatcactgt ttgcggtgac gttcatggtc agttctacga tcttctcaat	300
atctttgagc ttaatggcct cccttcggag gagaacccat acctatttaa tggcgacttt	360
gtggacagag gctcattctc cgttgagatc atcctcactt tgtttgcttt caagtgcag	420
tgcccatcat ccatatatct agccagagga aaccatgaaa gcaagagcat gaacaaaatt	480
tatggttttg aggggtgaggt tcgggtccaag ttgagtgaaa aattcgtgga tctctttgct	540
gaagttttct gttacctccc gttggctcat gttataaatg ggaaggctctt cgtggtacat	600
ggagggtcttt tcagtgttga cggcgtgaaa ctctcagaca tcagagccat tgacagattc	660
tgtgagccac cagaggaagg actaatgtgt gaactattgt ggagtgatcc tcaacctctc	720
cctggaagag gcccaagcaa gcgaggagtt ggtctatcat ttggtggaga tgtgacaaag	780
aggtttttgc aagataacaa tttagatttg ttggtccggt cacatgaagt aaaagatgaa	840
ggttatgagg ttgaacatga cggtaaactc ataactgtct tctctgcgcc aaattactgt	900
gatcagatgg gtaataaggg agccttcatt cgttttgaag ctcttgatat gaagccaaac	960
attgttacat tctcagcagt gcctcatccg gatgtgaagc ctatggcata tgcaaacaac	1020
tttctcagga tgttcaacta a	1041